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|-------------------------------|-----------------|--------------|--|
| <b>Notice of Allowability</b> | Application No. | Applicant(s) |  |
|                               | 10/033,110      | WOLF ET AL.  |  |
|                               | Examiner        | Art Unit     |  |

Esaw T. Abraham 2133

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1.  This communication is responsive to amdt filed on 03/02/06.
2.  The allowed claim(s) is/are 18-23 (renumbered as 1-6).
3.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a)  All
  - b)  Some\*
  - c)  None
  1.  Certified copies of the priority documents have been received.
  2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3.  Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4.  A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5.  CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a)  including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1)  hereto or 2)  to Paper No./Mail Date \_\_\_\_\_.
  - (b)  including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6.  DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

#### Attachment(s)

1.  Notice of References Cited (PTO-892)
2.  Notice of Draftsperson's Patent Drawing Review (PTO-948)
3.  Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4.  Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5.  Notice of Informal Patent Application (PTO-152)
6.  Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7.  Examiner's Amendment/Comment
8.  Examiner's Statement of Reasons for Allowance
9.  Other \_\_\_\_\_.

*ALBERT DECADY*  
 SUPERVISORY PATENT EXAMINER  
 TECHNOLOGY CENTER 2100

***EXAMINER'S AMENDMENT***

1. An examiner's amendment to the record appears below. Should the changes and or additions be acceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no latter than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Ronald Neerings on 04/04/06.

2. The application has been amended as follows:

**As per claims 11-17:**

Please change "(withdrawn) to ---Cancelled--- (see claim 11, line 1).

Please change "(withdrawn) to ---Cancelled--- (see claim 12, line 1).

Please change "(withdrawn) to ---Cancelled--- (see claim 13, line 1).

Please change "(withdrawn) to ---Cancelled--- (see claim 14, line 1).

Please change "(withdrawn) to ---Cancelled--- (see claim 15, line 1).

Please change "(withdrawn) to ---Cancelled--- (see claim 16, line 1).

Please change "(withdrawn) to ---Cancelled--- (see claim 17, line 1).

***Examiner's statement for reason for allowance***

1. Claims **1-17 and 24-29** are cancelled.
2. Claims **18-23** have been allowed.

The following is an examiner's statement for allowance:

**As per claim18:**

The prior art, Maru (U.S. PN: 6,516,444) of record in figure 2A teach or disclose an output from sum form an adder and a parity sequence are input to two's complement circuits (203 and 204) with control terminals wherein each of the complement circuits (203 and 204) has a function of calculating two's complement of input data or directly outputting the value of input data in accordance with the signal level of the control terminal and a most significant bit (201) representing the polarity of input data is input to the control terminals of the complement circuits (203 and 204) (see col. 4, lines 40-64). However, the prior art taken singly or in combination fail to teach, anticipate, suggest, or render obvious a maximum a posteriori decoder, comprising: an alpha block for producing alpha state metrics in two's complement format; a beta block for producing beta state metrics in two's complement format; an extrinsic block having an input coupled to said alpha block and said beta block for receiving said alpha state metrics and said beta state metrics as operands, said extrinsic block responsive to said operands for producing extrinsic data; and, said extrinsic block including logic coupled

to said input for determining, for each operand, whether an original value is within a predetermined proximity of a maximum positive/maximum negative value boundary associated with the two's complement format, and an adjuster coupled to said logic and responsive to a determination by said logic that any of the original operand values is within the predetermined proximity for adjusting all of the original operand values such that cross over from the maximum positive value to the maximum negative value is avoided and to produce respectively corresponding adjusted operand values for use in producing the extrinsic data. Consequently, claim 18 is allowed over the prior art.

Claims 19-23, which are directly or indirectly dependents of claim 18 are also allowable over the prior art.

### ***Conclusion***

3. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Esaw Abraham whose telephone number is (571) 272-3812. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are successful, the examiner's supervisor, Albert DeCady can be reached on (571) 272-3819. The fax phone numbers for the organization where this application or proceeding is assigned are (571) 273-8300 for regular communications and (571) 273-8300 for after final communications.

Information regarding the status of an Application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or PUBLIC PAIR. Status

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information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Esaw Abraham*  
Esaw Abraham

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*A* ALBERT DEGADY  
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